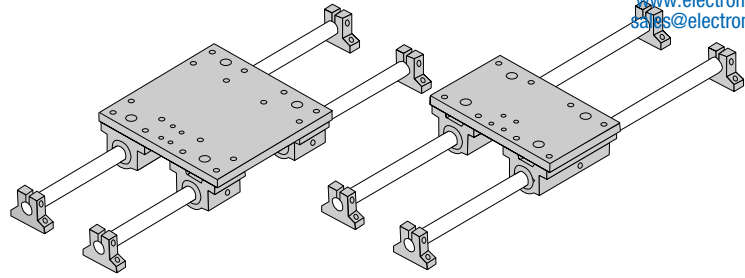


# End Support 1BC

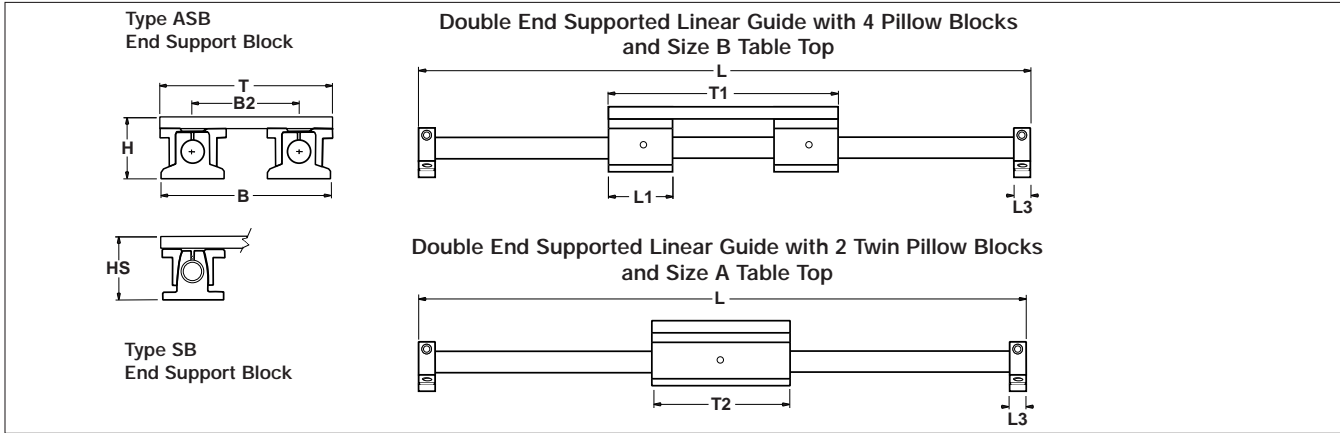
## Linear Guide #9

with Table Top

*End Supported,  
Industry Standard Dimension*



**INCH**



**End Support Linear Guide 1BC with 4 Pillow Blocks and Table Top (Size B)** (Dimensions in inch)

Part Number		Nom. Dia.	L1	L3	H	HS	B	B2	T	T1	Max. Stroke Length	Pillow Block	Shaft Support	
W/Type ASB Shaft Supports	W/Type SB Shaft Supports												Type ASB	Type SB
1BC-04-AHB	-	.250	1.19	.50	1.187	-	3.75	2.25	4.00	4.00	L-(5.0)	SPB-4-XS	ASB-4-XS	-
1BC-06-AHB	-	.375	1.31	.56	1.312	-	4.13	2.50	4.50	4.50	L-(5.62)	SPB-6-XS	ASB-6-XS	-
1BC-08-AHB	1BC-08-AJB	.500	1.69	.63	1.937	2.062	5.25	3.25	5.50	5.50	L-(6.76)	SSUPB-8-XS	ASB-8-XS	SB-8-XS
1BC-12-AHB	1BC-12-AJB	.750	2.06	.75	2.562	2.687	7.00	4.50	7.50	7.50	L-(9.0)	SSUPB-12-XS	ASB-12-XS	SB-12-XS
1BC-16-AHB	1BC-16-AJB	1.000	2.81	1.00	3.062	3.187	8.75	5.50	9.00	9.00	L-(11.0)	SSUPB-16-XS	ASB-16-XS	SB-16-XS
-	1BC-20-AJB	1.250	3.63	1.13	-	4.000	-	6.75	11.00	11.00	L-(13.26)	SSUPB-20-XS	-	SB-20-XS
1BC-24-AHB	1BC-24-AJB	1.500	4.00	1.25	4.500	4.500	12.75	8.00	13.00	13.00	L-(15.5)	SSUPB-24-XS	ASB-24-XS	SB-24-XS

**End Support Linear Guide 1BC with 2 Twin Pillow Blocks and Table Top (Size A)** (Dimensions in inch)

Part Number		Nom. Dia.	T2	L3	H	HS	B	B2	T	Max. Stroke Length	Pillow Block	Shaft Support	
W/ Type ASB Shaft Supports	W/ Type SB Shaft Supports											Type ASB	Type SB
1BC-04-BHA	-	.250	2.50	.50	1.187	-	3.75	2.25	4.00	L-(3.50)	TWN-4-XS	ASB-4-XS	-
1BC-06-BHA	-	.375	2.75	.56	1.132	-	4.13	2.50	4.50	L-(3.88)	TWN-6-XS	ASB-6-XS	-
1BC-08-BHA	1BC-08-BJA	.500	3.50	.63	1.937	2.062	5.25	3.25	5.50	L-(4.75)	SSUTWN-8-XS	ASB-8-XS	SB-8-XS
1BC-12-BHA	1BC-12-BJA	.750	4.50	.75	2.562	2.687	7.00	4.50	7.50	L-(6.00)	SSUTWN-12-XS	ASB-12-XS	SB-12-XS
1BC-16-BHA	1BC-16-BJA	1.000	6.00	1.00	3.062	3.187	8.75	5.50	9.00	L-(8.00)	SSUTWN-16-XS	ASB-16-XS	SB-16-XS
-	1BC-20-BJA	1.250	7.50	1.13	-	4.000	-	6.75	11.00	L-(9.75)	SSUTWN-20-XS	-	SB-20-XS
1BC-24-BHA	1BC-24-BJA	1.500	9.00	1.25	4.500	4.500	12.75	8.00	13.00	L-(11.50)	SSUTWN-24-XS	ASB-24-XS	SB-24-XS

**Shaft Deflection Note:**

Load limit may be below the dynamic load rating due to shaft deflection. Bearings can accommodate up to 1/2° deflection. See Engineering Section (pg 204) for Deflection calculations.

## End Support Linear Guide

### 1BC Benefits:

- Includes table top with standard tapped holes for quick and easy mounting of the work piece.
- Includes Ball Screw Assembly attachment holes for ease of assembly and actuation.
- Available with 60 Case\* LinearRace\* shaft end support blocks in either light weight aluminum or rigid iron materials.

## End Support Linear Guide

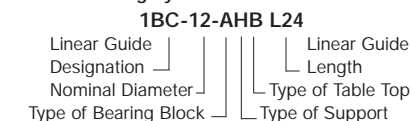
### 1BC Components: †

- 4 Super Smart Ball Bushing\* pillow blocks or 2 Super Smart Ball Bushing twin pillow blocks.
- 2 60 Case LinearRace shafts.
- 4 Shaft End Support Blocks.
- 1 mounting table top with work piece and Ball Screw Assembly attachment holes.

### Specifying a Thomson Linear Guide:

1. Determine the proper system for your load and life requirements.
2. Select the part number.
3. Add the letter "L" followed by the overall length in inches, as a suffix to the part number.

### Part Numbering System



**Type SSUPB Super Smart Ball Bushing Pillow Block**  
**Type SPB Super Ball Bushing Pillow Block**

**Type ASB LinearRace Shaft End Support Block**

**Mounting Table Top**

**Type SPB Super Ball Bushing Pillow Block**  
**Mounting Hole Position for Sizes .250 and .375**

† Sizes .250, .375 and .500 have oil lubricant fitting. Sizes, .625 and above have 1/4"-28 access for lubrication.

Type SPB and SSUPB Pillow Blocks (Dimensions in Inches)													Type TWN and SSUTWN Pillow Blocks				
Part Number	Nom. Dia.	L1	H9	H8	H5	B9	B7	J	J1	F		Wt. lb	Part Number	Nom. Dia.	L2	J3	Wt. lb
										Bolt	Hole						
SPB-4-XS	.250	1.19	.81	.437	.19	1.63	1.00	1.31	.75 <sup>(2)</sup>	#6	.16	.10	TWN-4-XS	.250	2.50	2.00	.19
SPB-6-XS	.375	1.31	.94	.500	.19	1.75	1.12	1.44	.88 <sup>(2)</sup>	#6	.16	.13	TWN-6-XS	.375	2.75	2.25	.25
SSUPB-8-XS	.500	1.69	1.25	.687	.25	2.00	1.38	1.69	1.00	#6	.16	.20	SSUTWN-8-XS	.500	3.50	2.50	.40
SSUPB-12-XS	.750	2.06	1.75	.937	.31	2.75	1.88	2.38	1.25	#8	.19	.62	SSUTWN-12-XS	.750	4.50	3.50	1.24
SSUPB-16-XS	1.000	2.81	2.19	1.187	.38	3.25	2.38	2.88	1.75	#10	.22	1.24	SSUTWN-16-XS	1.000	6.00	4.50	2.48
SSUPB-20-XS	1.250	3.63	2.81	1.500	.43	4.00	3.00	3.50	2.00	#10	.22	2.57	SSUTWN-20-XS	1.250	7.50	5.50	5.14
SSUPB-24-XS	1.500	4.00	3.25	1.750	.50	4.75	3.50	4.12	2.50	1/4	.28	3.94	SSUTWN-24-XS	1.500	9.00	6.50	8.08

Housing Material: Aluminum Alloy Black Anodized

<sup>(2)</sup>Two mounting holes as shown in view A-A for sizes .250 and .375

Housing Material: Aluminum Alloy Black Anodized

Anodized

Type ASB LinearRace Shaft End Support Block										Type SB LinearRace Shaft End Support Block									
Part Number	Nom. Dia.	L3	H3	H1	B	B3	G		Wt. lb	Part Number	Nom. Dia.	L3	Hh	Hc	Bb	B3	G		Wt. lb
							Bolt	Hole									Bolt	Hole	
ASB-04-XS	.250	.50	.88	.500	1.50	1.12	#6	.16	.06	SB-8-XS	.500	.63	1.62	1.000	2.00	1.50	#8	.19	.3
ASB-06-XS	.375	.56	1.00	.562	1.62	1.25	#6	.16	.08	SB-12-XS	.750	.75	2.12	1.250	2.75	2.00	#10	.22	.5
ASB-08-XS	.500	.63	1.48	.875	2.00	1.50	#8	.19	.11	SB-16-XS	1.000	1.00	2.56	1.500	3.25	2.50	1/4	.28	1.0
ASB-12-XS	.750	.75	1.95	1.125	2.50	2.00	#10	.22	.22	SB-20-XS	1.250	1.13	3.00	1.750	4.00	3.00	5/16	.34	2.0
ASB-16-XS	1.000	1.00	2.48	1.375	3.25	2.50	1/4	.28	.44	SB-24-XS	1.500	1.25	3.50	2.000	4.75	3.50	5/16	.34	2.6
ASB-24-XS	1.500	1.250	3.50	2.000	4.75	3.50	5/16	.34	1.16	Material: Iron									

End Support Material: Aluminum Alloy Black Anodized

Mounting Table Top (Dimensions in inches)															
Nominal Diameter	All Table Tops					Table Top Size B					Table Top Size A				
	T	M	J	H6	F5	T1	J1	J4	J5	N	T2	J3	J4	J5	N1
.250	4.0	2.25	1.31	.250	#8-32	4.0	.75 <sup>(2)</sup>	.22	.22	3.50	2.50	2.00	.25	.22	2.0
.375	4.5	2.50	1.44	.250	#10-32	4.5	.88 <sup>(2)</sup>	.22	.28	3.75	2.75	2.25	.25	.28	2.0
.500	5.5	3.25	1.69	.375	1/4-20	5.5	1.00	.34	.28	4.50	3.50	2.50	.50	.31	2.5
.750	7.5	4.50	2.38	.500	5/16-18	7.5	1.25	.41	.31	6.00	4.50	3.50	.50	.31	3.0
1.000	9.0	5.50	2.88	.500	3/8-16	9.0	1.75	.53	.31	7.00	6.00	4.50	.75	.31	4.0
1.250	11.0	6.75	3.50	.750	1/2-13	11.0	2.00	.82	.38	8.50	7.50	5.50	1.00	.38	5.0
1.500	13.0	8.00	4.12	.750	1/2-13	13.0	2.50	.75	.44	10.00	9.00	6.50	1.25	.44	6.0

Carriage Material: Aluminum Alloy Black Anodized

<sup>(2)</sup>Two mounting holes as shown in view A-A for sizes .250 and .375

<sup>†</sup> Super Ball Bushing\* bearings are used in .250 and .375 inch size pillow blocks.